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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,493	07/16/2003	Hitoshi Akiyama	58799-093	7280

7590 07/25/2008  
McDermott, Will & Emery  
600 13th Street, N.W.  
Washington, DC 20005-3096

EXAMINER
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LUONG, ALAN H

ART UNIT	PAPER NUMBER
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2623

MAIL DATE	DELIVERY MODE
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07/25/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/619,493	AKIYAMA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	ALAN LUONG	2623	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13, 15, 16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-16, 18-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

The art unit is changed into 2623.

The examiner of this application is changed

### *Response to Amendment*

This Office Action is responsive to the Amendment filed on 04/ 14/ 2008.

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular, claim 1 recites “**a distributor which distributes said received first and second signals to said primary channel selector/demodulator and said secondary channel selector/demodulator; wherein: when said first signal is received by said input unit, said received first signal is input to said primary channel selector/demodulator without being passed through said distributor.**” The claim as recited presents a logical inconsistency such that reception of both the first and second signal requires that the distributor distribute both the first and second signal without the first signal being passed through said distributor. The specification does not enable one

skilled in the art to distribute the first signal via the distributor without passing it through the distributor.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13, 15-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,154,505 to Konishi et al.; in view of US Patent 7,333,791 to Richter et al.; further in view of US Pub. 2002/0184650 by Stone.

**Regarding claim 13:** Figs. 1- 4 of Konishi illustrates **a receiver capable of receiving a first signal [2] and a second signal [3]** from an input terminal [1], **said first signal [2] being a signal of a broadcast of a first system [analog VSB-modulated terrestrial signals]** , **and second signal [3] being a signal of a broadcast of a second system [digital VSB-modulated terrestrial signals as CATV signal]** (Konishi, col. 11 lines 23-27). **When said first signal [2] is received by said input unit [1]**, said received first signal is input to a **primary channel selector/demodulator** which includes a tuner [2], filter [6], trap circuit [11], a same bandwidth filter [12] wherein the filter **[12] selects channels for said received first and second signals**, same detector [8] and VSB processors [7, 9] for **demodulates** video and audio of **the first signals** and a tuner [3], filter [12], detector 8 and digital VSB processor [10] for **demodulates** video and audio of **the**

**second signals.** (Konishi, col. 9 lines 31-44, and col. 11 lines 6-43). Furthermore, Fig. 24 of Konishi illustrates demodulator section of 8VSB-modulated signals for digital terrestrial broadcast as “**said broadcast of said first system comprises a terrestrial broadcast modulated in accordance with an 8 VSB scheme or an OFDM scheme (col. 2 lines 21-40)**”; and Fig. 25 of Konishi illustrates demodulator section of 16VSB/QAM-modulated signals for digital **CATV modulated in accordance with a QAM scheme.** (Konishi, **col. 2 lines 41-59**).

However, Konishi is silent with “**a branch circuit** which distributes said received first and second signals to said primary channel selector/demodulator and when said second signal is received by said input unit, said received second signal is distributed by said branch circuit such that it is input to both said primary channel selector/demodulator and said secondary channel selector/demodulator which selects a channel for an additional information signal included in said received second signal and demodulates said additional information signal wherein said additional information includes encryption information on a CATV broadcast signal.

In an analogous art directed toward a similar problem namely improving the results from **a branch circuit** which distributes said received first and second signals. Fig. 2A of Richter illustrates a coupler [211] as **a branch circuit which distributes said received first** [Forward Application Terminal-FAT channel] **and second signals** [Forward Data Channel-FDC] (col. 1 lines 43-57) **wherein when said first signal or said second signal is received, said branch circuit distributes it to said primary channel selector/demodulator and said secondary channel selector/demodulator such**

**that power of a signal input [FAT channel] to said primary channel selector/demodulator is larger than power of a signal input [FDC] to said secondary channel selector/demodulator. (Richter, col. 5 lines 27-42)**

Therefore, at the time of the invention, it would have been obvious to a person having ordinary skill in the art to modify a receiver of Konishi with a coupler as taught by Richter in order to split an input signal into two outputs signals with different amplitude level for testing or design target.

Neither Konishi nor Richter fails to teach “a secondary channel selector/demodulator which-selects a channel for an additional information signal included in said received second signal and demodulates said additional information signal”.

In an analogous art directed toward a similar problem namely improving the results from a secondary channel selector/demodulator which-selects a channel for an additional information signal included in said received second signal and demodulates said additional information signal. Fig. 3 of Stone illustrates a receiver [112] comprising:

A frequency agile OOB tuner 45 **selects a channel** [Out Of band channel] and a **secondary channel selector/demodulator [52] demodulate for an additional information signal** [encryption] **included in said received second signal** [FDC 34 of CATV signal] **(Stone, ¶0018 to ¶0020); and Stone also discloses wherein said additional information includes encryption information on a CATV broadcast signal”.**(Stone, ¶0018)

Therefore, at the time of the invention, it would have been obvious to a person having ordinary skill in the art to modify a receiver of Konishi and Richter with a secondary channel selector/demodulator as taught by Stone, in order to detect out of band information as EPG for monitoring channel information of in-band channels or decrypts the program if encrypted at service provider.

**Regarding claim 15:** The receiver as claimed in claim 13, Figs. 8 and 9 of Konishi illustrate wherein said primary channel selector/demodulator [203] includes a demodulation circuit capable of demodulating both a terrestrial broadcast signal modulated in accordance with an 8 VSB scheme or an OFDM scheme and a CATV broadcast signal modulated in accordance with a QAM scheme. **(Konishi, col. 15 line 56 to col. 16 line 40).**

**Regarding claim 16:** The receiver as claimed in claim 13, Figs. 8 and 9 of Konishi illustrate wherein said primary channel selector/demodulator [203] **wherein said primary channel selector/demodulator includes a first demodulation circuit** when switch [221] is switched over to the amplifier [222] **for demodulating a terrestrial broadcast signal demodulated in accordance with an 8 VSB scheme or an OFDM scheme** and a **second demodulation circuit** when switch [221] is switched to bypass the amplifier [222] **for demodulating a CATV broadcast signal modulated in accordance with a QAM scheme.** (Konishi, col. 15 line 56 to col. 16 line 40).

**Regarding claim 18:** The receiver as claimed in claim 13, Richter teaches “wherein said secondary channel selector/demodulator includes a QPSK demodulator for demodulating said additional information”.(**Richter, col. 1 lines 30-42**)

3. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,154,505 to Konishi et al. and US Patent 7,333,791 to Richter et al.; in view of US Pub. 2002/0184650 by Stone; further in view of US Pub. 2003/0001970 by Zeidler et al.

**Regarding claim 19:** Konishi, Richter, Stone discloses a receiver in claim 13; but fail to teach a video display device a display for decoding a signal demodulated by said receiver and displaying it as video, a channel for said demodulated signal being selected by said receiver.

In an analogous art directed toward a similar problem namely improving the results from a video display device. Fig. 1 of Zeidler illustrates **a video display device** [10] comprising: a set top box [10] has the same function as **the receiver as claimed in claim 1**; which has tuner [12] receives Analog signal [19] and Digital signal [21] through splitter [14]; path [19] is feed into Demodulator [16] for demodulating Analog signal into Analog Video and path [21] is feed into Demodulator [18] and MPEG decoder [20] for demodulating Digital signal into MPEG stream. Both **demodulated signals** are coupled to an on screen display graphics system [40] contains A/D and D/A conversion section [42, 46] selectivity by bypass switch [24] to output [60] to **a display device and displaying it as video**, Fig. 2 shows a method to select **a channel for said**



**demodulated signal being selected by** switch [43] of **said receiver** under control by microprocessor [26].( **Zeidler, ¶0012 to ¶0022**)

**Regarding claim 20:** The video display device as claimed in claim 19, Zeidler also teaches **wherein said video display device identifies a broadcast system** by selectivity of switch 14 to select Analog or Digital input under control of microprocessor [26] **through user operation or automatically and** Analog signal will bypass OSD system [40] through switch [24] to output [60] will display without any degradation **indicates it on said display.**( **Zeidler, ¶0021 to ¶0022**)

### ***Response to Arguments***

Claims 14 and 17 are cancelled.

Applicant's arguments, see "In summary, Flickner does not teach or suggest "when **said second signal is received by said input unit, said received second signal is distributed by said distributor such that it is input to both said primary channel selector/demodulator and said secondary channel selector/demodulator,**" as required by claim 1." (Remark, page 11), filed 04/14 /2008, with respect to the rejection(s) of claims 1, 2, 5 and 7-9 have been rejected under 35 U.S.C. 103(a) as being unpatentable over US Pub. No. 2001/0037512 by Flickner et al.; in view of US Patent 4,405,946 to Knight have been fully considered and are persuasive. The rejections of claims 1, 2, 5 and 7-9 have been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of : US Patent 6,154,505 to Konishi et al.; US Patent 7,333,791 to Richter et al. and US 2002/0184650 A1 by Stone, .

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALAN LUONG whose telephone number is (571)270-5091. The examiner can normally be reached on Mon.-Thurs., 8:00am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. L./  
Examiner, Art Unit 2623

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/Scott Beliveau/

Supervisory Patent Examiner, Art Unit 2623